CONSERVATION



Family Farm Team Dams Gully Growth

Three generations of Quastad men are putting a plug into erosion on their family farm. They are building a dam to stop additional gully growth on their Emmet County land. Experts say their work will also help others downstream by improving water quality and reducing the potential for flooding.

The dam is large–180 feet wide and 30 feet deep–and it's designed to stop erosion from taking more of their soil and enlarging a gully that grew more than 100 feet in 2008.

Don, Randy, Tom and Jason Quastad are building their gully-stopping dam with help from U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS).

Don is the grandfather. He and five members of his family own the farm where the structure is being built. Don's sons, Tom and Randy, and grandson Jason are helping

with construction by providing earth moving equipment and experienced labor for the project.

"The gully would continue to wash upstream if we weren't building this dam," said Don Quastad. "You stop the soil loss and you stop the gully formation. This structure will help us and the land."

The dam is located on a very hilly portion of the 160-acre farm located near Estherville where the Quastads grow corn, soybeans and wheat on 107 acres. The rest of the land is either timber or enrolled in the Conservation Reserve Program (CRP) to reduce erosion.

"This dam, or erosion control structure as we like to call them, is a pretty sizeable project," said Bill Fitzgerald, NRCS soil conservation technician in Emmet County. "The design calls for moving enough earth to fill 1,200 dump trucks. Dan Grabe, an NRCS engineer in Storm Lake, designed the structure and the design was approved by engineers in our state office. Field people like me help NRCS engineers monitor construction so we can be certain it is built to NRCS specifications and standards. This gives the Quastads and the taxpayers an assurance everyone will get the best possible outcome from this project."

The Quastad men know construction, but they have not built a dam before now. Don built grain bins for 15 years. Randy gained experience as an earth moving equipment operator building roads and housing developments in California. Tom built hog buildings and Jason worked construction during college summer breaks.







Don Quastad says they are thankful for NRCS' assistance on the project. "You don't do something like this on your own," he said. "There is too much potential for failure with a dam. You need to know elevation, storage capacity, pool depth and so on. I'm grateful for their help."

There is a 241-acre watershed above the erosion control structure. Fitzgerald says the dam will form a permanent pool of water

14 feet deep and is designed to take storm surges from a 50-year storm.

Environmental Quality Incentives Program (EQIP) funds are helping fund the estimated \$29,276 in construction costs. The project will be completed in early 2009.

Contact your local NRCS office for more information on erosion control structures. -30-

Dick Tremain, Public Affairs Specialist USDA-NRCS, Des Moines January 2009



Don Quastad and his grandson, Jason Quastad, stand with Bill Fitzgerald next to the inlet pipe on a dam they are building on the Quastad's farm in Emmet County. Fitzgerald is an NRCS soil conservation technician. NRCS designed the dam and is providing technical and financial assistance to help the Quastads build the erosion control structure to stop gully erosion and improve water quality on their 160-acre farm.